

AMERICAN ELECTRIC GENERATORS (1,800 K. W.).

A YANKEE ALADDIN

The Westinghouse Industrial Palace at Trafford Park.

RAPID CONSTRUCTION

A CONTRACTOR FROM THIS COUN-TRY DID THE WORK.

Growth of the English Electrical Industries Operated by American Capital.

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MANCHESTER, England. The modern Aladdin is an American, and his name is George Westinghouse. His lamp is an electric one and when he rubs it his industrial palaces spring up in all parts of the world. Every one knows of the great works at Pittsburg. They have a capital of \$20,000,000, they employ 9,000 men and their field is the United States. There are Westinghouse works in France, Germany and in Russia, but, most wonderful of all, especially in their construction, are the British Westinghouse works at Trafford Park. Only a few months ago the grass grew where their foundations now stand, but they are already turning out all sorts of electrical appliances for every part of the British empire

The Biggest of the World.

I despair of giving you an adequate conception of these shops. They are the biggest works of the world that have ever been erected at one time. The buildings cover twenty-six acres and the floors thirty-eight. There are twenty-seven miles of railroad track in the grounds about them and 3,000 men have been kept busy for fifteen months laying the bricks and joining together the iron and glass.

There is a big wall about the grounds,

and in entering the factories my letter of Introduction was carried to the offices by an English policeman, and it was in company with Mr. Loud and Mr. Mitchell, the rintendent that I took a walk around the great structures. The trip was a Sabbath day's journey. It seemed to me that we went miles in passing up one building and down another, going from floor to floor, now standing in the mighty bays away up under the glass roof and now walking on the ground amid the immense machines used for various kinds of electrical manufacture. I got some idea of the size of the buildings by these machines. Looking at them from the roof, hose at the end of the shops seemed no digger than wheelbarrows, and an immense oring machine, the biggest ever erected

ooked quite small from the gallery. We went through the blacksmith's shop, which is bigger than a half dozen ordinary actories, and the great iron foundry. next entered the machine shop, which has an area of about nine acres, being larger than any other machine shop of the united kingdom. Electric cranes, which can lift many tons at once, run along overhead and the machinery below is of every de-

off the increased values created by the Yankee Contractor With English Employes.

The rapid construction of this factory has been a miracle to the English. The job was offered to the local contractors on the condition that it should be finished within twenty months. The Englishmen replied that no man living could put up buildings like these in less than five years.

The Westinghouse Company thereupon went to America for its builder. They chose a smooth-faced stocky contractor named Stewart, who had made a reputation for quick work in Pittsburg, Chicago and New Orleans. They showed him the plans and told him that they wanted the buildings completed within fifteen months. Mr. Stewart replied that he could do it, and he put the plans in his left breast pocket and started for England. He had never crossed ocean before, but this did not phase t. He took a corps of Yankee assistants with him to use as superintendents and settled down in a little hotel outside the works. He had only 236 men when he began, but four weeks later his force numbered 2,500, and by advertising extra wages he got the best of the English bricklayers and carpenters for miles around to work on his job. His men kept a 'ccord of what each hand did, and the prospect of completing the buildings was daily estimated by the amount being done.

American vs. British Workmen.

He soon saw that he must get more work out of his men or the buildings would not be completed in time. He was surprised at the poor results obtained in comparison with what he had been accustomed to in the United States, and it seemed to him that the men were not doing half work. The masons were laying only 450 bricks a day, and upon his objecting he was told that 350 bricks were the tale required of each man by the London county council. Mr. Siewart told the men that they ought to lay as many as 2,000 bricks a day, and they laughed at the idea. By pushing and by rewards he at last got them up to an average of 800 bricks a day, but there stopped. He then imported some American masons and set them working beside the English laborers. The Americans easily hald from 1,800 to 2,200 bricks daily, and the Englishmen, who were too proud to be beaten by the "blarsted Yankees," put on a spurt and did equally well. Stewart increased the pay according to the work, and there was no objection from the trades unions. The bricklayers kept up their hus-tling from that time on to the end, and the result was that he got an average of 2,000

He pushed the carpenters in much the same way and by the use of automatic ma-chinery quadrupled the product of his steel and iron works. To make a long story short he put up all the buildings in the time he had contracted for and made a reputa tion for himself as a wonder among the contractors of England. He is still in the country and has been asked to take charge of the building of the Midland Hotel in Manchester. This hotel was begun before the laying of the foundations of the Westinghouse works, but little or no progress has been made upon it. The Midland rail-way wants the work rushed, and they have ranks of the English aristocracy and given the charge of it over to Stewart. Mr. Stewart says that there is no trouble in handling English labor if you do it after the American methods of paying big wages and of insisting that it be done your own way.

The Ghosts of Feudalism Shaken.

These Westinghouse works are shaking the ghosts of feudalism. They stand upon We the old Trafford estate, which has been cut up to make a building site for them. The Trafford estate has been in one family for a thousand years. It consisted of 2,000 acres and is known as Trafford Park. Ralph Trafford held it at the time of the Norman conquest, and as you stand in the Westing-The steel furnaces in another part of the house buildings you can plainly see the old



IN THE MACHINE SHOP.

works are a new thing in England. They are so made that the whole furnace can be turned by the pulling of a lever, so that ten pounds or ten tons or more of steel can be run out in a mighty golden stream to

Like an Exposition.

The buildings, in short, look more like great exposition structures than common workshops, and their contents are more interesting than any exposition I have yet visited. The roofs are of iron and glass, so that the shops are flooded with light, and this brightness is added to by the white paint with which everything connected with the interior is covered. Great atten-tion has been paid to the comfort of the employes, and the workmen will probably the envied of their kind in the British Isles. The buildings have cost, so I am told, about \$5,000,000 and the machinery within them about \$5,000,000 more.

An American Town in England.

When these works are in full operation they will employ about 5,000 hands, and a town built on the American plan is growing up there to house them. A building company entirely independent of the electric company has been formed and this company now owns 120 acres of land adjoining the works. It has laid out a town just as we lay out our towns in the west. The streets are in regular blocks, and they are marked by numbers. The ordinary British street has no name that indicates its loca-tion, and the people here are surprised at this settlement of 1st street, 2d street, 3de street and 4th street and of numbered avenues. About 3,000 buildings are to be erected and about 600 are under roof. The houses are called cottages, but they are in reality little two-story bricks of from four to six rooms built in blocks. Each house has its bath and its electric light, which are quite curiosities in workmen's dwellings in England. The houses will be rented at cheap rates to the Westinghouse men, but there will be no compulsion, and any man can live where he pleases.

ancestral hall, which was erected when Queen Elizabeth reigned, looking out of the trees. Sir Edmund Trafford was knighted by Henry VI, it may have been because the king thought he had discovered, as he cialmed, the secret of the philosopher's stone, which would turn everything it touched into gold. However this may be, the Trafford family has been a rich one throughout the generations, and it has, I understand, other valuable estates outside this today.

How Hooley Made \$3,000,000.

In the past few years, however, the means of Sir Humphrey de Trafford became crippled by extravagances of various kinds and he sold his ancestral home, so it is said, to pay debts of honor. At any rate it came into the hands of Hooley, the mushroom millionaire, who made a fortune in floating companies in association with lords and dukes, whom he bought by the score at so many guineas per head for the use of their Hooley paid about two million dollars for the property five years ago and later on sold it to the Trafford Park Company for five million dollars, making a cool three million dollars out of the operation. The Trafford Park Company still owns the most of the estate and it was from them that the Westinghouse Company bought the land for their shops. They have 130 acres, and, therefore, plenty of room for expansion.

Other shops have sprung up on other parts of the park, for the place is specially fitted for manufacturing. It is just on the edge of the sister cities of Manchester and Salford, which have a population of 800,000, and is in the most thickly settled part of industrial England. The park borders upon the Manchester ship canal, so that the factories within it have a water route to the sea. The country about it is gridironed with railways, and machines can be shipped to every part of Great Britain.

Fortunes in Electricity. There is no doubt in my mind but that a

The town company expects to put up a large hotel for commercial travellers, and will also have schools and club buildings and recreation grounds. I understand that a number of Americans have stock in the sompany and that some have bought land some have bought land.

Her Impression.

Her Impression.

From the Chicago News.

The new Atlanta penitentiary will be ultimately utilized for the confinement of all United States prisoners convicted in the southern states. There have been many complaints made to the Department of Justice that the factories cannot keep monkeys good to eat?"

"Really, Louise, this bill is outrageous. The new Atlanta penitentiary will be ultimately utilized for the confinement of all United States prisoners convicted in the southern states. There have been many complaints made to the Department of Justice that prisoners shipped from the south-shop girls."—Life. great deal of money will be made within

pace with it. In 1897 the aggregate capital employed in electrical industries was about \$300,000,000, and this has now increased to almost \$800,000,000.

There are, I am told, about 1,500 different electrical enterprises in the united kingdom and these during the year 1900 paid an average dividend of 7½ per cent. Great Britain and America together have 21,000 miles of electric car tracks, and of these only 900 belong to Great Britain. Still this country has almost as many large towns as we have. Its people live in towns and the most of them in towns large enough to have electric cars. The towns are situated close together and in the future the whole ountry will be covered with a network of electric lines as though by a spider's web. The field of electric lighting is also great Very little of it is found in private houses, and the municipalities will eventually supply electric lights to their citizens at a moderate profit. Fifteen million dollars' worth of loans were sanctioned by parlia-ment for such lights in 1900, and in the two years preceding the total loans authorized amounted to more than \$50,000,000.

Manipulated by Yankees.

So far the chief establishments for making electrical supplies here have originated in or have been backed by the United States. All the companies are under British names, and they use to a large extent British employes, although more or less Americans are connected with all of them. The British Thomson-Houston Company is closely associated with the General Elec-tric Company of New York. It has just finished building large electric works at Rugby at a cost of more than \$1,000,000. The Dick, Kerr & Company makes electrical supplies at Preston, near Liverpool. It has bought the Walker patents and has Prof. Sidney Short, who was manager of the Walker combination in the United States, as its head. In addition to these, there are many smaller electrical companies which are entirely British, but the bulk of the electrical machinery used here in the future will be made in the works originated by the Americans. The people here want American machinery, and even the engineers of the municipalities frequently stipulate in their contracts that their engines, cars and dynamos shall be of

They Deal in Millions.

Of all the electrical works, however, the British Westinghouse Company has by far the greatest. It has put more money into its business and is doing everything on the largest scale. Its capital is ten million doilars and it is already paying 6 per cent dividends on its preferred stock. I get this from a statement made by Mr. George Westinghouse at a meeting of the share-holders in London not long ago. In his speech he referred first to the wonderful prosperity of the Pittsburg works, which had paid 7 per cent dividends right along on a capital of twenty million dollars and at the same time accumulated a surplus. He said that the British company Juring the past year had made enough to give the preferred stockholders 6 per cent and in addition a surplus of ninety thousand dollars. This had been done although all the orders had to be executed in America, and now that the works in Great Brtiain were in peration the profits should be much larger. In this speech Mr. Westinghouse spoke of the gas engines which were being made in the United States and which will be also turned out here in Manchester. He be-lieves that gas rather than steam is to be the future motive power, and is making simple gas engines at Pittsburg which will furnish as high as 2,500 horse power. I am told that the works here are aiready

loaded with contracts, among which are some of the largest contracts ever issued. One is the transformation of the Mersey tunnel railway at Liverpool from steam to electricity, and others are the power houses and equipment of the enormous railroad system of underground London. The Me-tropolitan roads, which are headed by Mr. Yerkes, will have sixty-nine miles of double lines and the District religence. ines and the District railway, which runs outside these, will have thirteen miles of double line, the cars of both companies ronning to a certain extent over the tracks of the other. FRANK G. CARPENTER.

THE "REMITTANCE" MAN.

Reminder of Time When Australia Was Penal Colony.

Australia Correspondence London Mail. Even before the abolition of the convict transportation system, when the Australian colonies ceased to be merely penal settlewealthy middle classes which supplied Australia with a small but unceasing stream of undesirable British emigrants.

This custom was, and is, for fathers and heads of families to dispatch their irremediably lazy, vicious and ne'er-do-well or dipsomaniac younger sons and relatives to the various Australian states, and there maintain them from actual starvation by a small quarterly-paid life pension remitted to them through a bank, which said pension, it is mutually agreed between donors and recipients, shall be absolutely and forever forfelted if the emigrants on any pretext quit Australia.

Hence the remittance man-a by no neans contemptible unit of Australian population when his class is considered in its numerical aggregate, but in every other respect a despicable creature and an incomparably useless member of society. In the excessive local slang he is known as a "waster," a term which reaches the ne plus altra of contemptuous sentiment and criti-

Quite nine-tenths of remittance men are incurable dipsomaniaes. The remaining one-tenth comprises a curious band hopeless rogues, spendthrift bankrupts, criminal imbeciles, cashiered army officers, defaulting plungers and other unprincipled blackguards. It is Australia's chief grievance against the motherland that England selfishly persist in foisting on our shores this continuous stream of proved bad blood, from which no good can ever be extracted, and which only serves to swell the ranks of our lunatic asylums, our charitable institutions and our gaols.

Doctors at Funerals

A correspondent asks one of my medical contemporaries: "When a medical man attends the funeral of a patient, should his carriage precede the hearse, or follow the other carriages in the procession?" The editor replies that "It would be quite out of place for a doctor's carriage to precede the hearse." That may be his opinion; but there may be others who will think it in accordance with the fitness of things that the doctor should figure in the pro-cession as conducting the deceased to the grave. Evidently the doctor who asked the question thought that he ought to go in front, and he ought to know better than anybody else how far he was entitled to the most prominent position in connection with the ceremony. Personally, were I a doctor, I think I should keep as far away from my patients' funerals as possible. It is one of the few cases where the profes sional rules against advertising seem to be entirely in the interest of the practioner.

Where Prayer Never Ceases

From the Methodist Magazine. There is one spot in the United States where the voice of prayer is never still. For more than twenty months the "turret of prayer" that surrounds the Temple of Truth, near Lisbon Falls, Me., has never for an instant been without the sound of a human voice in supplication. It is the intention of the people who attend to this re-markable form of worship that prayer in the turret shall never cease so long as the building shall stand. Those who take part n the service compose the Holy Ghost and Us Society. The society affiliates with no denomination, and tries to conform strictly to the teachings of the Bible. Starting without a penny, it has in a few years achieved such success that it has built four buildings, the Temple of Truth among them, which form a rectangle capa-ble of seating 20,000 people.

A Wise Boy.

From Puck.

Jimmy-"What made you kick when you paw told you to sprinkle the lawn? Don't you like to do it?" Willy-"Sure I do; but if paw knowed

that he wouldn't let me!" Her Impression.

Uncle Sam Has Spread Himself in Construction.

HAPPEN TO BE JAILS

OFFERED TO THE WORLD AS MODEL INSTITUTIONS.

Occupants Are to Wear Civilian Garb -Will Eat Together, but Sleep Apart.

Written for The Evening Star.

Uncle Sam is putting his finishing touches ipon the most modern and best-equipped penitentiary of the world-a great prison which penologists at home and abroad are expected to regard as a model for construction, maintenance, management and discipline. This institution is the federal penitentiary at Atlanta, Ga.-our first elaborate national jail built for the exclusive confinement of offenders against the United States

A still greater federal penitentiary is rising on the national reservation at Fort Leavenworth, Kan. Although each of these institutions will cost a round half million, the latter will be much the larger and more complete, because it is being erected entirely by convict labor. The federal prisoners of the temporary penitentiary at Fort Leavenworth are toiling day by day to erect massive walls for their own confinement. Not a few of these unfortunates work with the consciousness that they are weaving about themselves a fearful web which must entangle them for life. The Atlanta penitentiary has been built under private contract. The labor, while more expensive than that done by the convicts in the west, has been more rapid. Both of the big jails will be conducted alike.

The Atlanta penitentiary is a colossal letter "T" laid flat upon the ground. The top of the "T" is occupied by cells exclusively; the stem by the dining room, kitchen, chapel, hospital, storage, ice, heating and electric plants. At the point of junction of the base and the stem of the "T" is a rotunda, within which are the penitentiary offices. All departments are under the same roof. The warden and his staff may, from the rotunda, view every part of the

All Cells Locked at Once.

The long, rectangular front structure is a well-lighted hall from whose center rise five tiers of steel cells. In each tier are two rows, each containing thirty-eight cells. Thus there are 380 cells, each with two bunks. The total capacity of the big prison therefore is 760. Each cell is 51-2 feet wide, 9 feet deep and 81-4 feet high; is made of the finest tool-proof Bessemer steel and is coated inside with silver-aluminum paint. Every one contains a white enamel stationary washstand, hygienic closet and table, in addition to the two folding bunks, which turn up against the partition when not in use, and which are provided with mattresses, pillows, sheets and spreads. The floors of the cells are granitoid. A novelty of arrangement is that a utility corridor separates the two rows of cells in each tier. This improves ventilation and affords space for heating pipes, electric wires and repairs. Each tier is surrounded by a steel gallery. The rotunda cuts the entire cell space into two separate blocks. A novel locking mechanism is placed at a steel box, which, when open, displays a crank and lever. By turning the crank all cells in the row can be locked or unlocked simultaneously. The lever, however, may be set to keep any individual cell locked while all of the others are opened, as in the case where one prisoner is deprived of his liberty for purposes of discipline.
This great prison has its own ice factory

electric plant, chapel, pharmacy, hospital and laundry. Great whirling fans always send a breeze of fresh air through the cells and other apartments. In fact, the water supply, ventilation, drainage, electric lighting and steam heating are as excellent as those of the Waldorf-Astoria. The hospital contains fifty beds, and there is continually on hand a resident physician receiving a salary of \$1,600 a year. The chaplain is

given \$1,500 a year.

The discipline of this new prison will be firm, but not severe. No corporal punish-ment, no lock-step will be allowed by the Department of Justice, into whose jurisdic-tion all federal prisoners fall after conviction by the courts. There is no dungeon in the entire institution, and the most extreme punishment countenanced by the Washington authorities will be solitary confinement in the cells of the lowest tier. By good behavior each convict will earn the privilege of joining the daily assembly of prisoners in the chapel during certain prescribed hours. Here they may read, write and enter into conversation with one another.

The congregate system of feeding prisonmarched three times daily into one large dining room. Here are arranged long tables of plain board, along the sides of which are to provide an aisle through which the con-victs may march, single file, to and from meals. They will be permitted to use knives, forks, spoons and china dishes, but will be denied the luxury of table linen. They will have breakfast daily at 6:30, dinner at noon, supper at 5:30. The average cost per man per day for food will be about eleven cents. Here is a sample menu pre-scribed for one day in the new penitentiary: Breakfast-Rice, prunes, bread and butter, coffee.

Dinner-Baked beans, salt pork, tomatoes, corn bread. Supper-Hominy, beef hash, bread, coffee On some days fresh beef, liver, bacon, sausage, syrup, currants, raisins, peaches, apples, etc., will be items allowed. The walls of the kitchen, dining room and cell houses are lined with white enamel brick to a height of six feet above the floor.

Stripes Abolished.

One of the most striking reforms which goes into effect with the opening of this model penttentiary is the abolition of the stripes, except as a safeguard when the convicts are working outside the prison walls. It is Uncle Sam's theory that such marks of degradation lower a man in his own estimation, if he be continually branded therewith.

The new prison garb is a civilian suit of plain sky-blue woel, a blue and white "hickory" shirt and a cap with visor. Twice a week in summer and once a week in win-ter each convict will be taken to the wellpenitentlary baths in the base ment, under the cell houses, where are ar ranged rows of porcelain-lined tubs and

A large building in which prisoners will A large building in which prisoners will be required to cut and dress stone for peni-tentiary purposes is shortly to be erected adjacent to the prison proper. This will be a roofed structure with only one door for entrance and exit; thus one guard will be able to prevent escape. New convicts will be selected for special prison duties according to their previous experience. Thus if the warden discovers a newcomer to be a cook, he will be put to work in the kitchen Many convicts previously enlightened as to this practice in penitentiaries purposely claim some aptitude which cannot be made use of by the warden. "Locomotive engineer" is a favorite profession for novices to claim, while there is record of one con-vict who announced that he was an aero vict who announced that he was an aero-naut and qualified for no other work. Un-cle Sam is opposed to contract labor in his federal prisoners, but has successfully em-ployed his convicts as farmers. At Fort Leavenworth the penitentiary farm consists of three or four hundred acres of fine bottom land. This is farmed for the maintenant the content town. nance of the penitentiary. Such staples as are grown in excess of prison demands are sold and the proceeds are turned into the

ern states to northern penitentiaries suffer from the climatic change. Federal con-victs from the northern and western states will be confined in the Fort Leavenworth penitentiary as soon as that is completed. At McNeil Island, Washington state, there is a third federal penitentiary, built many years ago. This has a capacity of only 100 and is utilized for the confinement of United States prisoners convicted in Alaska and Washington. and Washington.

"Boarding Out" Convicts.

But now that Uncle Sam has completed one big national hotel, where rooms and board are free, and is fast bringing an even larger institution of the kind to completion -the two having a joint capacity of 1,960the old system of boarding convicts out in the state penitentiaries will be considerably reduced. There are now about 3,000 federal convicts distributed about the country, but even were every bunk of the Atlanta, Fort Leavenworth and McNeil Island penitentiaries filled there would still be about a thousand convicts who would have to be board ed in state prisons. However, the Atlanta penitentiary has been built on lines which will admit of its enlargement to as great proportions as those of Fort Leavenworth, whenever Congress may see fit to appropriate the money.

To board out his prisoners it costs Uncle Sam all the way from 35 to 75 cents per man per day, and over 2,100 are now being supported outside of the federal peniten-tiaries. These have been sent preferably o the penitentiaries of the states in which they have been convicted. Congress has made the restriction that no federal convict, wherever incarcerated, shall be em-ployed at contract labor; nevertheless many United States convicts beg to be allowed to work for the contractor in order that they may earn the few cents overplus given each day to those working extra time. With this pin money prisoners in the state peni-

tentiaries may purchase little luxuries contributing to their happiness.

Federal convicts in the state prisons are subject to the local discipline. Thus two men who commit precisely the same offense may be subject to entirely different codes of discipline, depending upon the institution to which they are sent. Thus one may be subjected to the "separate" and the other to the "doubling up" system. One may be forced to maintain absolute silence during working hours and the other may be per-mitted to talk at wift.

New "Good Time" Law.

A new "good time" law for federal prisoners has just gone into effect this summer. Previously the reduction of a federal convict's term for good behavior depended upon the practice in the state prison to which he was sent. Thus one of our two men taken above for illustration might have a year only reduced from his term, while his brother in crime might be relleved of two, both having received the maximum reward for good behavior. The new "good time" law for federal convicts, wherever incarcerated, gives five days off in each month for sentences between six months and one year; one to three years, six days off per month; three to five years, seven days off each month; five to ten years, eight days; ten years or over, ten

lays.

Probably the next federal penal reform will be the adoption of the parole system, under which certain prisoners will be allowed to leave the penitentiary and to live at home under certain restrictions until their terms exclusive. their terms expire.

There are about fifty federal life convicts

now serving sentence. Each of these lives in the hope of pardon, and the Department of Justice is continually in receipt of peitions for mercy. Photographs showing results of disease are sometimes sent, and n one recent case an unfortunate obtained a specimen from a hospital which he sub-mitted as proof of his own pretended dis-

Federal Executions.

The law as to the execution of federal convicts is uniform. Hanging is the only legal death which a capital offender against the United States proper can suffer. Thus a federal hanging, when necessary, takes place even in a state where capital punishment is abolished or where electrocution has been adopted. Twelve years ago a United States prisoner was sentenced to hang in Omaha, although capital punishment had the end of each cell row. This consists of been previously abolished in Nebraska. The government had purchased ground for a post office, and there being no gallows owned by the state, the prisoner was hanged in one corner of that ground on an im provised scaffold. Federal capital offenders are generally executed in the nearest county

It costs Uncle Sam about \$50 to hang a Some time ago the question came up in the Department of Justice as to the fund from which this expense should be paid and a witty official gravely told the Attorney General that the money should be drawn from the appropriation for "the support of

Federal executions average only about two or three a year outside the Dis-trict of Columbia, but it is surprising that they are not more plentiful, inasmuch as there are eighteen civil offenses punishable by death under the federal statutes. These are treason, aiding and abetting to ommit murder, robbery or piracy on the high seas or in places under extreme juris. diction of the United States, rape in a fort or upon the high seas, corrupt casting of vessels on the high seas, piracy on the high seas, laying violent hands by sea-men upon their commander to prevent defense of vessel, robbery on shore by crew landing from piratical vessel, offenses on the high seas, in harbors or bays out of jurisdiction of a state, which on land would he nunishable by death; robbery or hostility against the United States under color of ommission from foreign state, making war on the United States on the high seas, forciers has been adopted for this institution. In other words, all of the convicts will be tempt to make him a slave or sell him as such, landing from vessel and seizing a negro with such intent, maliciously burning a dwelling house or barn inside the reservastationary opera chairs, whose bottoms lift tion of a fort, dockyard, etc.; burning vessels of war afloat on the high seas, rescuing by force persons found guilty of a capital crime.

The most phenomenal federal offense on record is now puzzling the authorities here. An official who just returned from Marshall, N. C., discovered that on the top of a mountain six or seven miles from that place a woman "moonshiner" is openly ply-ing her illegal trade. A warrant can be obtained for her at any time, but it would be futile to serve it, inasmuch as there is no means of carrying the prisoner down the steep mountain side in order to deliver her into the hands of the marshal. She

weighs 350 pounds.

JOHN ELFRETH WATKINS, Jr.

Remarkable Suicide in Paris. From the London Telegraph. An extraordinary case of suicide is re

ported from Evreux, in the department of the Eure. A Breton woman named Marie Morvan, aged thirty-five, dug a grave by the side of that of her sister and then buried herself alive. Morvan was an exemplary servant, employed by a farmer near Evreux. Recently one of her married sisters died, and on her deathbed extracted from Marie a promise. This was to the effect that the latter would faithfully marry her brother-in-law when he was left a widower. After the death of the sister Marie Morvan thought of the promise. As her brother-in-law, the widower, she re-solved to die. She would then, she consid-ered, join her sister in the next world and make matters all right with her. The woman, it appears, lifted up the gravestone over her sister, and after she had exca-vated a tomb for herself brought the slab down over her. Part of Marie Morvan's dress was seen protruding from the stone by another sister, a Madame Ledu, who went to visit the grave. Surprised, the woman called for help from people near at hand, and, the slab being raised up Marie Morvan was found dead in the grave dug by her own hands. She was suffocated soon after the headstone had closed on her Her hands and face were not covered by the earth, which she had managed to pile

What It Lacked. From the Chicago Tribune.

Visitor (at artist's studio)-"Yes, it's rather a striking picture, but it seems to lack local color." Artist-"Local color? Why, man, it's a painting of a rainbow!"

Visitor-"That's why I say it wants local color. It's not like any rainbow I've ever seen in this neighborhood."

MAKING OF PIANOS

An Interesting Census Bureau Review.

PROGRESSED BY STEPS

COMBINATION OF CLAVICHORD AND HARPSICHORD.

Was Invented Nearly Two Hundred Years Ago-Modern Improvements Nearly All American.

Government publications rarely contain matter of such general interest as a history of the nation's piano playing. Now and then the census bulletins, however, present in a compact and interesting form information which could hardly be found elsewhere and which is of the utmost interest to the general reader. In this category lies the following review of American plano making, taken from a recent bulletin on the manufacture of musical instruments:

The word "pianoforte," ordinarily abbre viated to piano, is traced back to 1598, and is said to have originated with an Italian musical instrument maker who speaks of an instrument called "plane e forte," the Italian for "soft and loud." Nothing is known, however, of the instrument referred to, and the expression, contracted to planoforte, first became established when the Italian Cristofori, the father of the modern piano, applied it to his invention in 1709.

The Clavichord.

The significance of the name arose from the character of the two instruments which the piano superseded, the clavichord and the harpsichord. Each of these instruments had a different origin. The monochord of the ancient Greeks, a long box of thin wood with a wire stretched across it, led, in the middle ages, to the invention of the clavichord. In this instrument the wires were made to vibrate by means of a keyboard similar to that already in use in organs. Hammers were raised, pressed and held against the wires, the player being able to feel their elasticity. A very delicate tone was obtained, which had something in it "charmingly hesitating and tremulous, capable of reflecting the most tender gradations of the touch of the player." For this reason it was a favorite in-strument with John Sebastian Bach, who preferred it to the pianoforte. Mozart also used the clavichord in composing several of his masterpieces, and Beethoven is reported to have said at one time: "Among all keyed instruments the clavichord is that on which one can best control tone and expressive interpretation." Its great fault, however, was the weakness of its tone.

The Harpsichord.

The rival instrument, the harpsichord, was an evolution of the psaltery or modifled, a small instrument, played with a plectrum or small piece of iron, bone or English, and its instruments were light in metal, fastened by rings to the hand of action and thin, sensitive and very musical the performer. In the harpsichord the harp-shaped frame was inclosed in a box, and the wires were plucked mechanically by quills attached to the end of each key. very unmelodious tone was aptly scribed as "a scratch with a sound at the end of it." In spite, however, of this tone quality, and the impossibility of obtaining soft effects, or, in fact, any dynamic modi-fication of the tone, the harpsichord was extensively used by Beethoven, Mozart, Handel and other eminent composers, espelly for concert work, because of its bri dued tone of the clavichord.

The Piano Forte.

It remained for Cristoforo of Florence in 1709, to produce an instrument capable of both "soft and loud" effects, the "piano e forte." In this instrument the wire, instead of being pressed or rubbed by means of a wedge, as in the clavichord, or plucked by means of a quill, as in the harpsichord, was struck with a hammer, which imme diately rebounded. A lighter or heavier stroke of the key, therefore, produced the "plano" or "forte" effects desired.

Piano factories were established in 1700 by Zumpf in England and by Silberman I Germany. In 1767, however, fifty-eight years after its invention, the plane was introduced on the stage of Covent Garden Theater as "a new instrument." This long delay in the introduction of planos was due party to conservatism and partly to an almost sentimental attachment to the clavi A musical critic in Leipzig wrote i 1782. "In the grand plane, the heart cannot express itself," while Forkel declared in his Musical Almanac, in the same year, that he preferred the clavichord to all other keyed instruments. Joseph Haydn was one of the first of the great masters to accept the piano. Mozart wrote concertos and other compositions for it, and finally, through Beethoven, it received full acknowledg-

Cristofori's pianoforte contained the es sential principle of the modern plane, but the improvements since that time have been extensive. The damper and soft pedals were introduced about the year 1780 by John Broadwood, an Englishman. Uprigh planos were first successfully made in 1807 when William Southwell of Dublin brought out his "cabinet pianoforte.

Almost all the pianos used in the United States at the close of the eighteenth century were imported, John Jacob Astor of New York importing one of the first in 1784. t soon appeared, however, that instruments constructed for the comparatively uniform and moist climate of England, shrank and opened at the seams when brought into the dryer atmosphere of the United States, with its severe winters, and the general custom of heating houses by means of stoves. This, added to the oxidation of the wires during the ocean voyage, and the loosening of the keys, greatly impaired or destroyed the tone and durability of the instruments, and led naturally to the establishment of the industry in the United States.

The American Industry.

The first piano known to have been buil in this country was made in Philadelphia in 1775 by John Behrent. Ten years later one George Ulschoefer began manufacturing in New York. In Boston Benjamin Cre hore and William and Adam Bent began work in 1797 and 1800, respectively, and lastly, the manufacture was probably carried on in Baltimore by John Harper as early as 1802. Between the years 1815 and 1825 a great business depression prevailed in Great Britain, and a number of young and skilled English piano makers and arti gan making pianos. Their arrival gave a great stimulus to the industry. Between 1825 and 1840 several manufacturers, conspicuously Jonas Chickering of Boston, introduced an improvement in their

planos, which has been called the creative feature of the plane of today, The frames of all early planes had been made of wood.

Since this alternately swelled and contract-ed with atmospheric changes, the strings stretched upon it were never subjected to the same strain, and were therefore con-tinually out of tune.

The Iron Frame.

The improvement mentioned above consisted in the use of an iron frame, cast in a single solid piece. This allowed a much greater tension of the strings, with a corresponding improvement in tone quality, for a string stretched to its utmost limit yields its largest, purest and most brilliant tone. In all early pianos the strings were strained hardly to the tension of a violin string. By 1876 frames were made capable of sustaining a string tension of twelve and one-haif tons. In that year Theodore Steinway of New York completed a series of metal-lurgical experiments which had lasted more than six years, and had taken him to many of the leading iron works of the leading iron works of many of the leading iron works of Europe. These experiments resulted in the tion of a frame capable of sustaining a tension of thirty tons.

The cast-iron frame, perfected by Jonas Chickering of Boston and others, and the method of overstringing, perfected and patented by Steinway & Sons of New York in 1859 and 1862, constitute probably the most important contributions the United States has made to the manufacture of planes. Both of these improvements have been very generally adopted in Europe as well as in the United States.

American Progress Since 1851. The position of the plane industry in the

United States as early as 1871 is indicated

by the statement of an English writer re-

garding the pianos exhibited at the inter-

national exhibition in London in 1851, that England had far outstripped every other nation, with the exception of America, in the manufacture of pianos. Since that date, as shown by statistics given earlier in this report, the progress of the industry has been very great. At 'he same time the art of piano making has been brought to great perfection. Almost all the important inventions, within the last half century, by which the tone and durable ty of pianos which the tone and durable ty of planos have been enhanced and increased have originated with American manufacturers, many of these improvements being imitated in Europe as soon as the details became known. "No grand plane of foreign make has ever been publicly heard in the United States since the advent of Thalberg, now nearly forty years ago; but many firstclass American concert planos have been and are at present publicly used in the art centers of Europe by the greatest artists."

The manufacture in the United States has been favored by the abundance of wood suitable for savinding boards as well. suitable for sounding boards, as well as for piano cases. The president of the New York Plano Makers' Association remarked in an address some years ago, 'Just as Italian and Tyrolese forests made Amati violins possible in Cremona, so American lumber has made it possible to bring plano making to its highest perfection in this

The history of the plane manufacture in the United States is characterized by the rise of two schools, the "New York school" and the "Boston school." It is curious to note how cities comparatively near each other were able for many years to main-tain technical conceptions and customs in relation to piano construction so consid erably at variance. The full cast-fron frame originated in Boston and was soon generally adopted in that city. Manufacturers in New York, however, refused for years to see its superior advantages. On the other hand, Boston manufacturers clung to a inferior plane action long after the improved action had been generally intro-duced into planos made in New York.

The Boston school was American, such traditions as it possessed being chiefly in tone. The New York school, on the other hand, was essentially German in its antecedents. Its instruments were such as might be expected from musicians who "worshiped the lusty genius of Beethoven and Wagner." These differences were marked as late as 1876, but have largely

disappeared since then Nativity of Piano Makers.

In 1850 the overwhelming majority of plano artisans were of American nativity, years, almost all are either foreign born (mostly German) or sons of foreign-born parents.

Nearly all pianos made in the United States during the first haif of the nine teenth century were square pianos. A species of upright planes had been made by Loud & Bres. of Philadelphia as early as 1826, and Jonas Chickering, one of the pioneers of the American piano industry, had constructed the first American grand piano in 1840. Up to the year 1866, how-ever, fully 97 per cent of all the planos made in the United States were square planos. Since that date a complete revolu tion has taken place in the piano indus The manufacture of square has now almost entirely ceased. The production in the United States in 1900 con-sisted of 97.4 per cent upright, 2.5 per cent grand and one-tenth of 1 per cent square pianos. The manufacture of pianos in the United States was formerly confined to New York, Boston, Baltimore and Philadelphia. Between 1880 and 1890 the industry began to assume importance in Chi-cago, and this city in 1900 ranked next to New York in the value of pianos produced.

Ravenous Fish.

From the Detroit Tribune. A strange circumstance is reported from Sandy Creek, Monroe county. On Wednesday evening of last week "Mike" Shilling was awakened by cries proceeding from the poultry house, and, rising, went prepared to make trouble abundant for the maraud-No person was discovered, however and the origin of the excitement puzzled Shilling; but as the squawkophone concert continued, Shilling, approaching nearer, saw that the Little Sandy, swollen to size by the rains, had "got full" and flooded the coop. The water was not up to the chicken perches, but along with the tide had come a herd of German carp, which were constantly flopping out of the water in an endeavor to grab the fowls. They had not yet succeeded in getting any, but Shilling would bet a dollar with any onthat he would have lost the entire had he not opportunely arrived and fright

London's Rough Riders. From the London Mail.

A branch of our auxiliary forces that the lessons of the war have again brought to the front is the Yeomanry. Throughout the country new regiments are being formed and old ones brought up to their full strength. The City of London Rough Riders are a recent growth. Yesterday the regi-ment assembled in Bushey Park to experience for a fortnight its first taste of camp life. Happy in its choice of a very picturesque uniform, which consists of the fa-miliar slouch hat, a blue khaki jacket over brown khaki breeches, and top boots, the force presents a very smart appearance The regiment is for the most part formed of clerks, nearly all of whom were until quite lately new to the saddle and rifle. Lord Maitland, who himself served in South Africa, is the founder of the force, and is devoting himself to raising it to the highest pitch of efficiency. Already it numbers

The sorrow we drown tonight turns up as a very disgusting floater in the morning.



Modern impressionist art-the garden party.-Punch.